

FLORENCE COPPERINC.

1575 W. Hunt Highway, Florence, Arizona 85132 USA

florencecopper.com

October 4, 2019

Mr. David Albright Manager, Groundwater Protection Section United States Environmental Protection Agency 75 Hawthorne Street San Francisco, CA 94105-3901

Re: Response to Comments, Administratively Incomplete Underground Injection Control (UIC) Permit Application No. R9UIC-AZ3-FY19-1

Dear Mr. Albright:

Florence Copper, Inc. (Florence Copper) is submitting by electronic mail and two hard copies via overnight courier service to your office of the revised UIC application and responses to your September 5, 2019 letter regarding Florence Copper's initial application. We believe the revised application meets all applicable UIC permit requirements. Also, included in this submission are our responses to each of the comments identified in your letter. Each comment is listed in italics and is followed by our response.

Please contact me at your earliest convenience if you have any concerns or questions.

Best Regards, Florence Copper Inc.

Dan Johnson

Vice President - General Manager

cc: Maribeth Greenslade, Arizona Department of Environmental Quality David Ross, Assistant Administrator, Office of Water Mr. David Albright October 4, 2019 Page 1

COMMENT 1

The Permit action requested on UIC Permit application form 7520-6 should be for a new permit instead of a modification (see 40 CFR § 144.31). Moreover, there is language throughout the Attachments referring to a permit modification that should be revised to reflect the appropriate permit action request. If we issue a new permit for the proposed commercial scale In-Situ Copper Recovery (ISCR) facility, we anticipate revoking the existing PTF permit concurrently with the new permit issuance (see 40 CFR § 124.5).

Response to Comment 1

Florence Copper has revised the application and attachments to reflect the fact that the application is for new permit rather than a permit modification.

COMMENT 2

Attachment A, Maps and Area of Review, Section A.3.2: The description of groundwater flow model simulation results is not sufficiently detailed to predict migration for each layer in the model for the new permit application (see 40 CFR §§ 144.31, 146.6). Please provide additional discussion and illustrations depicting the horizontal and vertical extent of migration of injected fluids under the different model scenarios, including the extent of vertical movement within the sidewinder and other intersecting faults. Also, provide the electronic files for the updated groundwater flow model data runs and results in the UIC application.

Response to Comment 2

Florence Copper has prepared ten additional Figures (Figures A-4 thought A-13) for inclusion in Attachment A that depict east-west and north-south cross sections through the well locations used to evaluate the horizontal and vertical distance of solution migration. The additional Figures reflect simulated horizontal and vertical solution migration under worst-case excursions lasting 48 hours and 30 days and were prepared using the updated groundwater model described in Attachment A. Text has also been added to Attachment A describing the solution migration depicted in the new cross sections. Florence Copper has also included a technical memorandum (Exhibit A-2) describing the model update, including the parameters modified and the basis for modification of the model.

COMMENT 3

Plugging and Abandonment (P & A) plans, EPA Forms 7520-19: Plugging and abandonment plans for the BHP test wells, 308 coreholes, and all non-Class III wells proposed for abandonment are missing from the application. In addition, we need you to confirm and correct the abandoned bottom hole depth for core hole 454S in the PTF well and corehole abandonment summary Table 1, Exhibit A-2. In addition, the P&A plans in the UIC Permit application for each block are not signed and dated. Please provide the



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missing P&A plans, pursuant to 40 CFR §§ 144.51, 146.34, and the signed and dated forms, pursuant to 40 CFR § 144.32.

Response to Comment 3

Florence Copper has completed plugging and abandonment plans for all of the existing wells within the AOR, and all of the coreholes within the AOR. The plugging and abandonment forms and associated diagrams for the existing wells within the AOR are included in Exhibit E-2 of Attachment E. The plugging and abandonment forms and associated diagrams for the coreholes within the AOR are included in Exhibit E-3 of Attachment E. plugging and abandonment forms for he BHP test wells were previously submitted to USEPA, but are included in Exhibit E-4 of Attachment E on the updated plugging and abandonment form.

COMMENT 4

Attachment F, Financial Assurance, Exhibit F-1: This document contains combined closure and post-closure cost estimates for both the Aquifer Protection Permit and the commercial-scale UIC Permit. Closure and post-closure cost estimates for the UIC regulated activities only should be provided in the UIC permit application so we may ensure that your financial responsibility proposal meets UIC requirements pursuant to 40 CFR §§ 144.31, 144.51, and 144.52. In addition, please provide evidence that the cost estimates represent independent third-party estimates for plugging and abandonment, aquifer restoration, and closure/post-closure activities.

Response to Comment 4

Florence Copper has revised the closure cost table included in Attachment F to separate costs resulting from activities or closure of project features regulated by the UIC Permit. The revised Table F-1 includes only costs related to activities or closure of project features regulated by the UIC Permit. Table F-1 also incorporates revised notes based on requests received from ADEQ. A summary Table (Table F-2) has also been added reflecting the sums of the detailed costs listed Table F-1 for in response to a request from ADEQ.

COMMENT 5

Attachment K, Optional Additional Project Information (40 CFR § 144.4): The description of Endangered Species Act (ESA) compliance references the WestLand Resources, Inc. report from 2011, included in Exhibit K-2. The description of National Historical Preservation Act (NHPA) compliance refers to amending the existing Memorandum of Agreement for the PTF. Please provide an updated biological evaluation of listed threatened or endangered species for the FCP site and provide a discussion of steps necessary to implement the NHPA Section 106 process for the commercial-scale FCP.

FLORENCE COPPER INC.

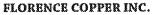
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Response to Comment 5

Florence Copper has included an updated biological evaluation of listed threatened or endangered species under the Endangered Species Act (ESA) for the FCP site as Exhibit K-1 of Attachment K. The updated 2019 Biological Evaluation concluded that no species with ESA or Bald and Golden Eagle Protection Act protections are expected to occur on or near the Florence Copper Project Area or to be affected by proposed Project activities. In addition, Attachment K includes a revised description of the six necessary steps that Florence Copper will follow in the NHPA Section 106 process.



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